UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------------------------|-----------------------|---------------------|------------------|
| 10/541,392 | 07/01/2005 | Walter Eugster | 05471.0061 | 6354 |
| | 7590 08/17/201 ENDERSON, FARAB | EXAMINER | | |
| LLP | ŕ | GWARTNEY, ELIZABETH A | | |
| 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 | | | ART UNIT | PAPER NUMBER |
| | , | | 1781 | |
| | | | | |
| | | MAIL DATE | DELIVERY MODE | |
| | | 08/17/2010 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Cumment | | Ap | plication No. | Applicant(s) | | | | |
|--|--|---|---|---|-------------|--|--|--|
| | | 10 |)/541,392 | EUGSTER ET AL. | | | | |
| Office Action Summary | | | aminer | Art Unit | | | | |
| | | EL | IZABETH GWARTNEY | 1781 | | | | |
| Period fo | The MAILING DATE of this communi or Reply | cation appears | s on the cover sheet with the c | orrespondence ad | dress | | | |
| WHIC - Exter after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MASSIONS OF time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum state to reply within the set or extended period for reply reply received by the Office later than three months a per patent term adjustment. See 37 CFR 1.704(b). | AILING DATE of 37 CFR 1.136(a). unication. tutory period will ap will, by statute, caus | OF THIS COMMUNICATION In no event, however, may a reply be tin ply and will expire SIX (6) MONTHS from the the application to become ABANDONE | N. nely filed the mailing date of this o D (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) file | d on 06 lune | 2010 | | | | | |
| • | | | ion is non-final. | | | | | |
| 3)□ | | <i>′</i> — | | secution as to the | marite is | | | |
| ٥/ك | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| | · | oc ander Ex pe | are Quayle, 1000 O.D. 11, 40 | 50 0.0. 210. | | | | |
| Dispositi | on of Claims | | | | | | | |
| 4)🛛 | Claim(s) <u>9,10 and 13-27</u> is/are pend | ng in the appl | ication. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ | Claim(s) 9,10 and 13-27 is/are reject | ed. | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | |
| 8)□ | Claim(s) are subject to restric | tion and/or ele | ection requirement. | | | | | |
| Applicati | on Papers | | | | | | | |
| 9)□ | The specification is objected to by the | Examiner. | | | | | | |
| • | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| . • / 🗀 | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| | Replacement drawing sheet(s) including | | | | FR 1 121(d) | | | |
| 11) | The oath or declaration is objected to | | | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) | Acknowledgment is made of a claim | for foreign pric | ority under 35 H.S.C. & 119(a) |)-(d) or (f) | | | | |
| | ☐ All b)☐ Some * c)☐ None of: | or roroigin prio | under 60 0.0.0. 3 110(a) | , (4) 5. (1). | | | | |
| ۵, | <i>- '- '-</i> | documents ha | ve heen received | | | | | |
| | Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Goo the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Attachmen | t(s) | | | | | | | |
| _ | e of References Cited (PTO-892) | | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notic | e of Draftsperson's Patent Drawing Review (P | TO-948) | Paper No(s)/Mail Da | ate | | | | |
| | mation Disclosure Statement(s) (PTO/SB/08) | | 5) Notice of Informal F 6) Other: | atent Application | | | | |
| Paper No(s)/Mail Date 6) L_ Other: | | | | | | | | |

Art Unit: 1781

DETAILED ACTION

1. The Amendment filed June 8, 2010 has been entered. Claim 28 is cancelled. Claims 9-10 and 13-27 are pending.

2. The previous 112 1st Paragraph rejections have been withdrawn in light of applicant's amendments made June 8, 2010.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9-10 and 13-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9, the recitation "directly shelling the grains" renders the claim indefinite because it is not clear how a process of "directly shelling" differs from a process of "shelling."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1781

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 9-10, 13-14, 17-18 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Müller (US 5,650,018) in view of Satake (US 5,025,993).

Regarding claims 9-10, Müller discloses a method for the preparation of wheat grains for milling (see Figure 3, C8/L36-41) including: (a) cleaning grain in a first dry state; (b) wetting the grain in a second stage (i.e. first wetting process); (c) conditioning the grain for 12-48 hours; (d) wetting the conditioned grain to moisten the surface of the grain (i.e. second wetting process); (e) removing part of the outermost skins (i.e. shelling) by scouring; and (f) grinding the scoured wheat grains (C4/L40-C5/L16, 34-38, C8/L24-29, 33-35, C9/L14-30, Figure 7).

While Müller discloses grinding the scoured wheat grains, the reference does not disclose that the method includes polishing the grains.

Satake teaches a method for making flour including polishing grain to produce polished grains (Abstract, C2/L25-27)). Satake teaches grindingly polishing cereal grains to partly strip and remove from each grain a surface portion including layers of pericarp, testa, exosperm and aleuron (C2/L33-62). Satake teaches that a flour free of pericarp, testa, exosperm and aleuron material is recovered using the grinding

Müller and Satake are combinable because they are concerned with the same field of endeavor, namely, processing grain for flour. It would have been obvious to one of ordinary skill in the art at the time of the invention to have polished, as taught by Satake, the ground grains of Müller for the purpose of making polished grain free of pericarp, testa, exosperm and aleuron.

Regarding claim 13, modified Müller discloses all of the claim limitations as set forth above and that the grinding of the grains occurs in a mill (Figure 1/75-77, C8/L35-38). Given that Müller discloses a vertical path conveying the grains in the mill (Figure 1/75-77), it is clear that the grains would inherently avoid contacting any horizontal conveying element in the mill.

Regarding claim 14 and 17-18, modified Müller discloses all of the claim limitations as set forth above and that the abraded material (i.e. residue) is collected and removed as the outermost skin is removed from the wheat grains (C7/L39, C8/L65-C9l?3). Further, Müller discloses separating the abraded material from the clean wheat grain through screening sections (i.e. sifting) (C9/L1-3).

Art Unit: 1781

Regarding claim 21, modified Müller discloses all of the claim limitations as set forth above. Further, Müller discloses that the grain is freed of loose skins using a winnower (i.e. separated by means of a current of air) (C7/L39-41).

Regarding claim 22, modified Müller discloses all of the claim limitations as set forth above. Given that Müller discloses a second wetting process wherein water is added only for the purpose of moistening the surface of the grain (C8/L27-29), it is clear that the second wetting process is light relative to the first wetting process.

Regarding claims 23-24, modified Müller discloses all of the claim limitations as set forth above. Müller also discloses a wetting device (i.e. wetting aggregate) and scouring machine (i.e. shelling mechanism) downstream of a weighing machine (C7/L18-52). Further, Müller discloses that the cereal grain flows from the weighing machine, to the scouring machine, and further flows to the wetting device (C7/L18-52).

Regarding claim 25, modified Müller discloses a process wherein the scouring machine (i.e. shelling mechanism) includes: (a) a rotatable rotor (C8/L54-58, Figures 5-6), a stator (Figures 5-6), screens (i.e. sifting basket) surrounding the rotor (Figures 5-6/109). Müller discloses that the separation (i.e. sifting) of the shelled grains is provided by the screens (i.e. sifting basket) (C8/L65-C9/L3).

Regarding claim 26, modified Müller discloses all of the claim limitations as set forth above. Note, with regard to the prior art, the phrase "roll" encompasses the entire scouring shell. Müller discloses that the scouring shell comprises screens and grates including slits uniformly spaced apart (C8/L61-67, Figures 5-6/109). Given that Müller discloses a scouring shell with

Art Unit: 1781

screens and grates comprising slits as presently claimed, it is clear that the slits would inherently allow air to enter the processing zone during scouring (i.e. shelling).

Regarding claim 27, modified Müller discloses all of the claim limitations as set forth above. Given that Müller discloses a process identical to that presently claimed wherein only 0.1 to 0.5% water is added after conditioning (C8/L22-29), it is clear that the moisture of the conditioned grains would inherently be 2% after the second wetting process.

9. Claims 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Müller (US 5,650,018) in view of Satake (US 5,025,993) as applied to claim 9 above, and further in view of Paquette (US 4,314,925).

Regarding claims 15-16 and 19-20, modified Müller discloses all of the claim limitations as set forth above. While Müller discloses the recovery of abraded grain material, the reference does not disclose pressing the material into pellets and using the pellets as fuel.

Paquette teaches a process for preparing solid fuel from grain including passing grain residue through a pelletizing mill where it is pressed into pellets (C2/L45-62), Figure).

Müller and Paquette are combinable because they are concerned with the same field of endeavor, namely, grain processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to have pelletized abraded grain material, i.e. residue, as taught by Paquette, from the grain cleaning process of Müller for the purpose of making a solid fuel and utilizing the bi-product of the grain cleaning process.

Response to Arguments

Page 7

Art Unit: 1781

10. Applicant's arguments filed June 8, 2010 have been fully considered but they are not persuasive.

Applicants argue that Müller does not disclose a shelling of the grain directly after the second wetting process. In contrast, applicants submit that "any purported shelling in Müller occurs in advance of the second wetting process." Applicants explain that "even though the disclosure of Müller describes dry abrading, [i.e. scouring], the grains upstream of performing a second wetting process", scouring differs considerably from shelling because shelling results in the removal of an external shell of grain while scouring results in the polishing and/or cleaning of a grain.

In this case, Müller discloses a device for cleaning grain wherein the grain is scoured after a second wetting process in a scouring machine (*see* Figure 7 wherein grain is subjected to a second wetting process at 22" and subsequently scoured at 42'). Müller also discloses that scouring removes the outermost skin of the grain(C4/L62-C5/L16, Claim 9). Given shelling results in the removal of an external shell of grain, since scouring results in removal of the outermost skin of the grain, it is the Examiner's position that shelling and scouring produce the same result, i.e. removal of an outermost or external surface of grain.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1781

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH GWARTNEY whose telephone number is (571)270-3874. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./ Examiner, Art Unit 1781

/Keith D. Hendricks/ Supervisory Patent Examiner, Art Unit 1781